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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,091	06/15/2001	Edmund Y. Ting	10400A-000011/US	8645
30593	7590	07/07/2006	EXAMINER	
HARNES, DICKEY & PIERCE, P.L.C.			MCKANE, ELIZABETH L	
P.O. BOX 8910			ART UNIT	
RESTON, VA 20195			PAPER NUMBER	

1744

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/883,091

Applicant(s)

TING ET AL.

Examiner

Leigh McKane

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 35-46, 48, 49 and 51-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35-46, 48, 49 and 51-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

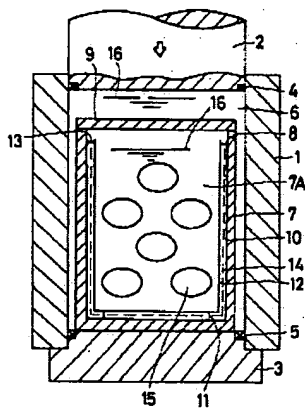
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 35 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Kazunobu (JP 6-7135).

Kazunobu teaches a method for pressure treating a product 15 wherein the method includes loading the product into a removable product carrier 12 surrounded by heat-insulating



material 7 which is inserted into a pressure vessel 1. The carrier 12 and its contents are pressurized with a volume of pressure media 16 for a selected period of time, after which the carrier can be removed from the pressure vessel. Alternately, a volume of preheated pressure medium can be added to the product carrier prior to inserting the carrier into the pressure vessel. As no particular adiabatic heating property values have been set forth in the claims, the examiner takes the position that the

insulating material 7 of Kazunobu has “substantially high adiabatic heating properties,”

inasmuch as it is sufficient to insulate the contents of the carrier.

***Claim Rejections - 35 USC § 103***

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazunobu as applied to claim 35 above, and further in view of Meyer (US 6,177,115).

While Kazunobu discloses preheating the pressure medium and adding a volume of preheated pressure medium to the product carrier prior to inserting the carrier into the pressure vessel, the reference is silent with respect to also preheating the product/product carrier and pressure vessel. The carrier 12 of Kazunobu is insulated on an exterior surface by insulating material 7. Meyer discloses a similar method wherein the product may be preheated or can be preheated within the pressure vessel equipped with its own heater. See col.7, lines 1-9. The pressure vessel is heavily insulated to maintain a constant temperature once preheated. Meyer further teaches preheating the pressure vessel prior to placing the product therein to the “target temperature” (sterilization temperature). Doing so along with careful choice of treatment pressure, Meyer discloses, “avoids loss of temperature when the presheated food is loaded and minimizes or prevents the loss of heat during the pressurized period when the initial food temperature is raised by the adiabatic heat to the target processing temperature.” See col.8, lines

Art Unit: 1744

46-51. For this reason, it would have been obvious to preheat the carrier and pressure vessel of Kazunobu with Voisin.

5. Claims 41-46, 52, 53, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazunobu in view of Meyer.

Kazunobu teaches a method for pressure treating a product **15** wherein the method includes loading the product **15** into a closed and removable product carrier **12** surrounded by heat-insulating material **7** which is inserted into a pressure vessel **1**. The carrier **12** and its contents are pressurized with a volume of pressure media **16** for a selected period of time, after which the carrier can be removed from the pressure vessel. As shown in Figure 4, the pressure media can be introduced through select media entry ports **29**. Alternately, a volume of preheated pressure medium can be added to the product carrier prior to inserting the carrier into the pressure vessel. As no particular adiabatic heating property values have been set forth in the claims, the examiner takes the position that the insulating material **7** of Kazunobu has “substantially high adiabatic heating properties,” inasmuch as it is sufficient to insulate the contents of the carrier.

While Kazunobu discloses preheating the pressure medium and adding a volume of preheated pressure medium to the product carrier prior to inserting the carrier into the pressure vessel., the reference is silent with respect to also preheating the product/product carrier and pressure vessel. The carrier **12** of Kazunobu is insulated on an exterior surface by insulating material **7**. Meyer discloses a similar method wherein the product may be preheated or can be preheated within the pressure vessel equipped with its own heater. See col.7, lines 1-9. The pressure vessel is heavily insulated to maintain a constant temperature once preheated. Meyer

Art Unit: 1744

further teaches preheating the pressure vessel prior to placing the product therein to the “target temperature” (sterilization temperature). Doing so along with careful choice of treatment pressure, Meyer discloses, “avoids loss of temperature when the presheated food is loaded and minimizes or prevents the loss of heat during the pressurized period when the initial food temperature is raised by the adiabatic heat to the target processing temperature.” See col.8, lines 46-51. For this reason, it would have been obvious to preheat the carrier and pressure vessel of Kazunobu.

Furthermore, as Meyer teaches that it is desirable to “maintain a fairly constant chamber temperature” and since Kazunobu already teaches insulating the carrier 12, it would have been obvious to assure insulation of the carrier between preheating and pressurizing, so as to avoid unwanted cooling of the product.

6. Claims 49, 51, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazunobu in view of Meyer and Kazuo (JP 2-182157).

Kazunobu teaches a method for pressure treating a product 15 wherein the method includes loading the product 15 into a removable and closeable product carrier 12 made of a heat-insulating material which is inserted into a pressure vessel 1. The carrier 12 and its contents are pressurized with a volume of pressure media 16 for a selected period of time, after which the carrier can be removed from the pressure vessel. As no particular adiabatic heating property values have been set forth in the claims, the examiner takes the position that the insulating material 7 of Kazunobu has “substantially high adiabatic heating properties,” inasmuch as it is sufficient to insulate the contents of the carrier. While Kazunobu discloses

Art Unit: 1744

preheating the pressure medium, the reference is silent with respect to also preheating the product/product carrier and pressure vessel.

Meyer discloses a similar method wherein the product may be preheated or can be preheated within the pressure vessel equipped with its own heater. See col.7, lines 1-9. The pressure vessel is heavily insulated to maintain a constant temperature once preheated. Meyer further teaches preheating the pressure vessel prior to placing the product therein to the “target temperature” (sterilization temperature). Doing so along with careful choice of treatment pressure, Meyer discloses, “avoids loss of temperature when the presheated food is loaded and minimizes or prevents the loss of heat during the pressurized period when the initial food temperature is raised by the adiabatic heat to the target processing temperature.” See col.8, lines 46-51. For this reason, it would have been obvious to preheat the carrier and pressure vessel of Kazunobu.

Kazunobu is silent with respect to evacuating the pressure media, reheating it, and reusing for treatment of another product. However, Kazuo discloses a method similar to that of Kazunobu wherein after the pressure treatment, the pressure medium is evacuated, reheated, and reused. As recycling is an efficient and economical use of the medium and temperature recovery, it would have been an obvious modification to the method of Kazunobu.

### ***Response to Arguments***

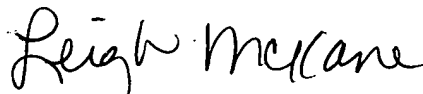
7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh McKane whose telephone number is 571-272-1275. The examiner can normally be reached on Monday-Wednesday (5:30 am-3:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
**Leigh McKane**  
**Primary Examiner**  
**Art Unit 1744**